

December-17-13 9:16:53 AM

Page 1

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

Work Order ID 110157

December-17-13 9:16:53 AM

110157

Page 2

Item ID: D412-705-017

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: N1 Gearbox Access Panel

Start Date: 12/17/13 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC4- 100% Inspect kits for completeness

0.00

120

DAS
6

14-1-29

(14)

QC

Memo

0.00

9-89

Quality Control

130

Packaging

0.00

130

14

14-1-29

DAS
6
9-89

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-705-

017 Location: 041 PPP Rev: B

140

QC21- Final Inspection - Work Order Release

0.00

140

ML5 14-01-29

QC

Memo

0.00

Quality Control

(14) 14-01-29

Picklist Print

December-17-13 9:16:51 AM

Page 1

Work Order ID: 110157

Parent Item: D412-705-017

Parent Item Name: N1 Gearbox Access Panel

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:C Removed Manufacturing 06-08-02 JLM
IPP Rev:D ECN 1052 07-11-06 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3C3A Bolt		Purchased	No			110	Each	1,266.0000	30	30	DAS 33 9-89		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST350		1266							
				122141		6							
				124028		42							
				124417		1218							
D3255-041 Access Panel Assy LH		Manufactured	No			110	Each	0.0000	1	1	DAS 33 9-89		
D3255-042 Access Panel Assembly		Manufactured	No			110	Each	2.0000	1	1	DAS 33 9-89		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST176		2							
				102401		2							
MS20427M3-3 Rivet		Purchased	No			110	Each	1,041.0000	36	36	DAS 33 9-89		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		44							
				121114		44							
				ST335		997							
				124231		997							
MS21060-I3K Nut Plate		Purchased	No			110	Each	49.0000	18	18	DAS 33 9-89		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST316		49							
				m126400		49							

Picklist Print

December-17-13 9:16:53 AM

Page 2

Work Order ID: 110157

Parent Item: D412-705-017

Start Date: 12/17/13

Required Date: 12/17/13

Parent Item Name: N1 Gearbox Access Panel

Start Qty: 1.00

Required Qty: 1.00

MS9321-09

Purchased

No

110

Each

255.0000

30

30

DAS

33

14-01-21

Washer

9-89

Location

Loc Qty

Loc Code

ST291

255

120867

25

124862

230

124862

DAS
31
9-89

DAS

6

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 33%;"> Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ </td> <td style="width: 33%;"> Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ </td> <td style="width: 33%;"> Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ </td> <td style="width: 33%;"> Engineering ☐ Quality ☐ Other ☐ </td> </tr> </table>	Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐	Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐	Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐	Engineering ☐ Quality ☐ Other ☐
Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐	Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐	Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐	Engineering ☐ Quality ☐ Other ☐			

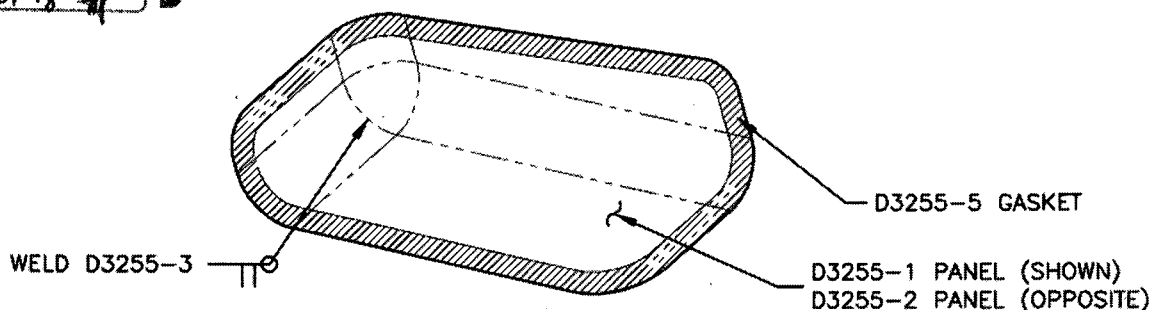
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

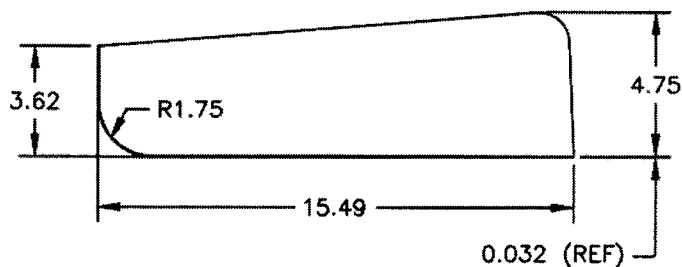
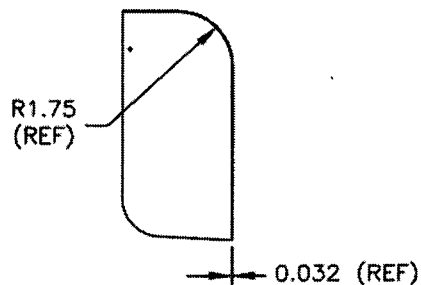
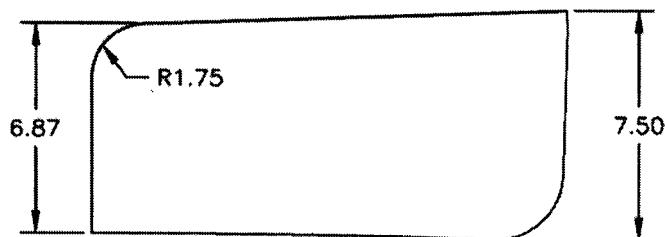
Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DART

DESIGN PT	DRAWN BY PT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED UP	APPROVED [Signature]	DRAWING NO. D3255	REV. B SHEET 1 OF 4
DATE 04.12.06		TITLE ACCESS PANEL ASSEMBLY	SCALE 1:6
A	04.01.27	NEW ISSUE	
B	04.12.06	D3255-3 REDESIGN; ADDED $\phi 0.098$	

RELEASED
05-01-18 #

D3255-041 ACCESS PANEL (SHOWN)
D3255-042 ACCESS PANEL (OPPOSITE)



D3255-1 BEND DETAIL
D3255-2 OPPOSITE

D3255-041/-042 NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3
- 3) INSTALL D3255-5 GASKET USING DOW CORNING P/N 736 ADHESIVE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS
- 4) IDENTIFY WITH P/N & B/N USING FINE POINT PERMANENT MARKER

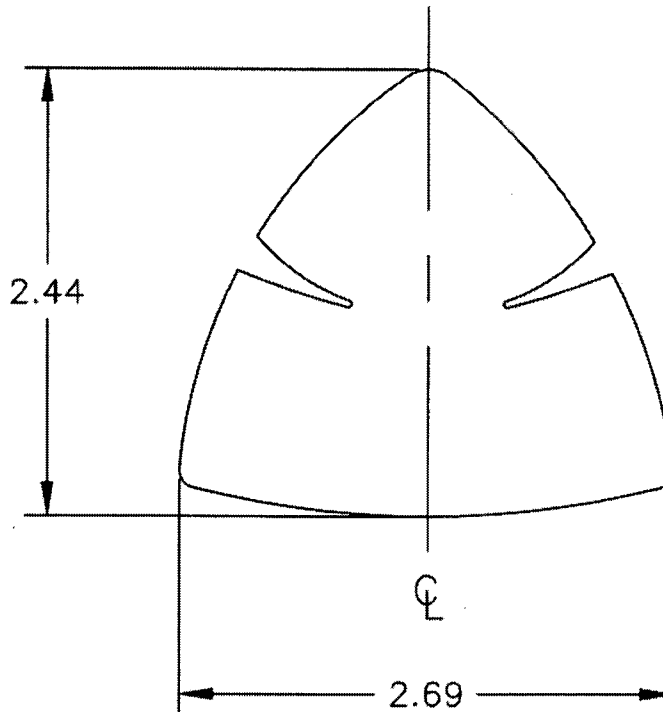
81-21-51
57W + S1011

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CHECKED UP	APPROVED [Signature]	DRAWING NO. D3255	REV. B SHEET 2 OF 4
DATE 04.12.06		TITLE TITLE	SCALE 1:1

RELEASED
05-01-18 [Signature]

D3255-3 CAP
FORM TO FIT D3155-1/-2

D3255-3 NOTES:

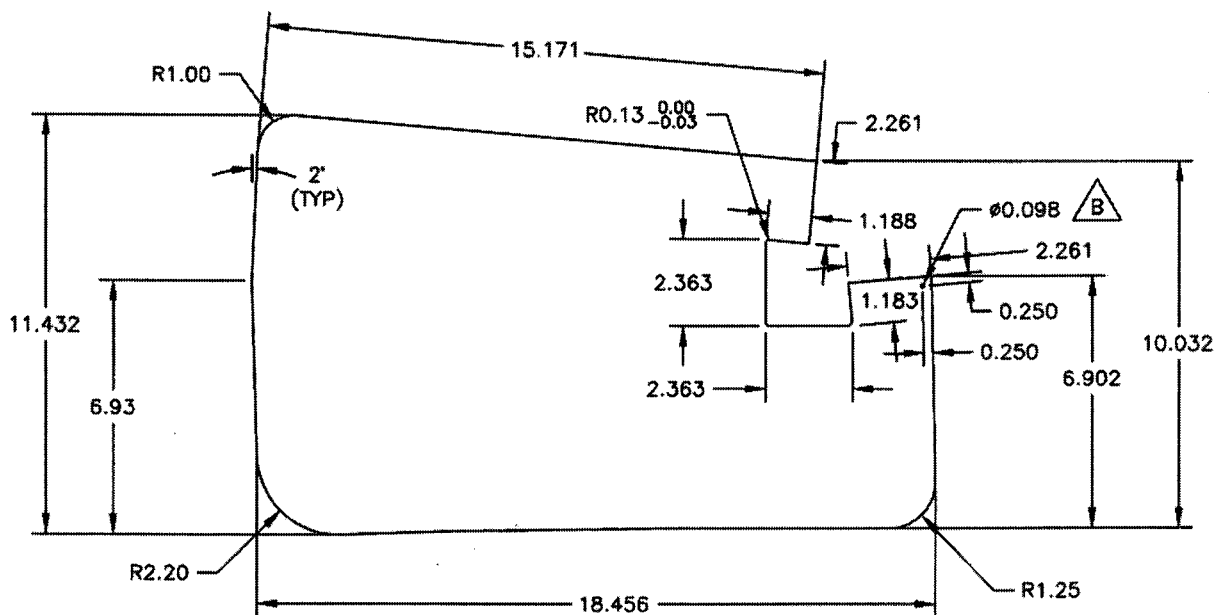
- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) MAKE PER DRAWING "D3255-B2.DWG"

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DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED UP	APPROVED [Signature]	DRAWING NO. D3255	REV. B SHEET 3 OF 4
DATE 04.12.06		TITLE ACCESS PANEL ASSEMBLY	SCALE 1:5

RELEASED
05-01-18**D3255-1/-2 FLAT PATTERN****D3255-1/-2 NOTES:**

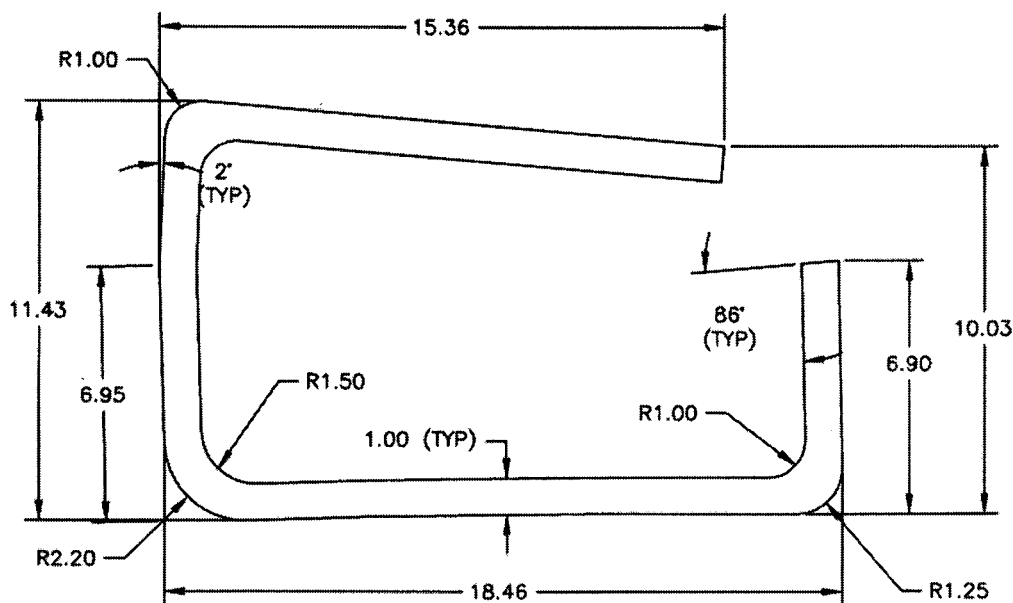
- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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DART

DESIGN JT	DRAWN BY JT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED UP	APPROVED JT	DRAWING NO. D3255	REV. B SHEET 4 OF 4
DATE 04.12.06		TITLE ACCESS PANEL ASSEMBLY	SCALE 1:5

RELEASED
05.01.18 JT**D3255-5 GASKET****D3255-5 NOTES:**

- 1) MATERIAL: SILICONE COATED FIBERGLASS CLOTH PER AMS 3320F
P/N SIL/F 36x36x1/16
POSSIBLE SUPPLIER: AVIALL
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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DAS
6
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REFERENCE ONLY

IIN-D412-705

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5.0 PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Part Number	Description
X							D412-705-011	TWIN PAK E-Z ACCESS KIT
1	X						D412-705-013	INTAKE PLENUM ACCESS PANEL KIT
1		X					D412-705-015	DRIVESHAFT TUNNEL MODIFICATION KIT
1			X				D412-705-017	N1 GEARBOX ACCESS PANEL KIT
1				X			D412-705-019	C-BOX OIL COOLER LINE SUPPORT ACCESS KIT
1					X		D412-705-021	OIL PRESSURE TRANSMITTER ACCESS KIT
1						X	D412-705-023	OIL COOLER SUPPORT REMOVABLE LOWER PANEL KIT
	1						D3245-041	ACCESS PANEL ASSEMBLY, LH
	1						D3245-042	ACCESS PANEL ASSEMBLY, RH
	2						D3245-043	DOOR ASSEMBLY
	2						D3245-9	GASKET
	2						D3245-11	GASKET
	2						D3245-13	GASKET
							D3255-041	ACCESS PANEL ASSEMBLY, LH
							D3255-042	ACCESS PANEL ASSEMBLY, RH
		1					D3256-1	ACCESS PANEL
		1					D3256-3	GASKET
				1			D3259-041	ACCESS PANEL ASSEMBLY, LH
				1			D3259-042	ACCESS PANEL ASSEMBLY, RH
					1		D3307-041	ACCESS PANEL ASSEMBLY
						30	AN3-3A	BOLT
		22	30		6		AN3C-3A	BOLT
		3					AN3C-4A	BOLT
						30	AN960JD10--	WASHER
	16	44	36		12		MS20427M3-3	RIVET
						2	MS21051-L3K	NUT PLATE
	8	22	18		6		MS21060-L3K	NUT PLATE
						18	MS21069-L3K	NUT PLATE
		25	30		6		MS9321-09	WASHER

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Revision: E
Date: 13.10.07